### ESTRO 36, 5-9 MAY 2017, VIENNA, AUSTRIA

### SATURDAY, 6 MAY 2017

	CLINICAL MEETING	INTERDISCIPLI NARY MEETING	BIENNIAL PHYSICS MEETING	BIENNIAL PHYSICS MEETING	RTT MEETING	PREVENT MEETING	GEC-ESTRO MEETING	GEC-ESTRO MEETING	
08:00- 08:40	Teaching Lecture  The role of radiotherapy in small cell lung cancer- current status and future development s	Teaching Lecture Immunotherapy	Teaching Lecture  MRI for RO physicists: what is what? QA geometrical distortions	Teaching Lecture  Cavity Theory: how can we separate the facts from the myths?	Teaching Lecture  High tech or low tech for metastatic disease, how does one decide and what is the cost-benefit?	Teaching Lecture  Gene editing: How this technique can be used to study radiation responses?	Teaching lecture  Target delineation and target definition for PBI		
08:45- 10:00	Symposium  How to move forward in NSCLC?	Radiotherapy plus immunotherapy combination: rationale and results so far  The immune-modulatory effect of radiotherapy on the tumour micro-environment: friend or foe?  The impact of tumour infiltrating lymphocytes on clinical outcome after (chemo)radiother apy  Radiotherapy and immunotherapy combination: paradigm changing or just	Particle therapy I	Symposium CT imaging, new developments Current status and potential of dual energy and spectral CT New CT reconstruction methods for artifact reduction and optimised image quality The potential of new CT technologies for radiotherapy with photons and protons	High tech or low tech for metastatic disease, how does one decide and what is the cost-benefit?  Palliative workflow  Evaluation of time, attendance of medical staff, and resources during stereotactic radiotherapy / radiosurgery: QUIRO-DEGRO trial  High tech approaches for curative treatment, when is enough enough?	Novel approaches in heart matters  State of the art in heart effects  Pharmacological modulation of cardiac radiation injury	Expanding brachytherapy indications  How the interventional radiologist can support brachytherapy implantations  The technique for CT/MR guided hepatic implantations  Tracking technologies for navigation in brachytherapy implantations  Using multiparametric US to redefine target volumes in brachytherapy		Poster Viewing 1

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10:00- 10:30	Coffee Break							ı	
10:30-	MTB	Symposium	Proffered Papers	Proffered Papers	Proffered Papers	Symposium	Proffered Papers	Proffered Papers	Poster Viewing 2
11:30	HNSCC	Response adapted treatment				Novel approaches in gut matters			
		Mechanisms and biomarkers of tumour response heterogeneity				State of the art in gut effects  Novel			
		Response optimised treatment planning and guidance				developments in mechanisms and prevention of gastrointestinal toxicities			
		Current status and future perspective of response adaptation							
11:40- 12:10	Van der Schue	ren Award Lecture						I	
12:10- 12:40	Iridium Award	Lecture							
12:40- 13:00	Honorary Phys	icist Award Lecture	•						
13:00- 14:45		ysics Members Asser Symposium, Poster							
14:45- 16:00	Symposium	Symposium	Symposium	Symposium	Symposium	Symposium	Symposium		Poster Viewing 3
	The optimal approach to treat oligometasta stic disease: different ways to handle an indication	Targeting tumour heterogeneity  Using heterogeneous brachytherapy dose distribution to target tumour	Particle therapy II	Imaging for therapeutic response / toxicity evaluation Functional imaging as biomarker for	Immobilisation and motion management, including comfort for patients  Immobilising the patient to be as	Novel approaches in brain matters  Effect of radiation on CNS stem cells  Amelioration of	Brachytherapy pays Introducing the GEC-Hero initiative Current knowledge on		
	quickly gaining acceptance	cell heterogeneity  The challenges of targeting tumour		Imaging tumour response to neoadjuvant	comfortable as possible. A general overview  Motion control of	CNS damage using stem cell approaches	QALY for brachytherapy Optimal utilisation of		

	approach to abscopal effects  What is the purpose of surgical mastectomy and do we achieve it?  What is the indication and what is the aim of clinical treatment: radiotherapy  What is the indication and what is the aim of clinical treatment: systemic treatment	heterogeneity in the field of radiation oncology  The impact of tumour heterogeneity on radiation therapy outcomes		treatment in GI tumours Imaging in animals	the patient, using the exactrac system  Motion of liver tumours using Active Breathing Control: keeping the margins small and the patient comfortable		brachytherapy in Europe - can it be measured?  Economic evaluation of radiotherapy including brachytherapy for cancer – pitfalls		
16:00- 16:30	Coffee Break								
16:30- 17:30	Proffered	Symposium	Proffered Papers	Proffered Papers	Proffered Papers	Symposium	Proffered Papers	Proffered Papers	Poster Viewing 4
	Papers	Oligometastatic disease				Novel approaches in particle biology  The ESTRO initiative on biological effects of particle therapy  RBE of protons  A small animal tumour model for low-energy accelerated particles  Novel models in particle biology research			<b>V</b>
17:40- 18:25	Honorary Mem					Novel approaches in particle biology  The ESTRO initiative on biological effects of particle therapy  RBE of protons  A small animal tumour model for low-energy accelerated particles  Novel models in particle biology			Ç

19:30

# **SUNDAY, 7 MAY 2017**

	CLINICAL MEETING	INTERDISCIPLI NARY MEETING	BIENNIAL PHYSICS MEETING	BIENNIAL PHYSICS MEETING	RTT MEETING	PREVENT MEETING	GEC-ESTRO MEETING	GEC-ESTRO MEETING		
08:00- 08:40	Teaching Lecture  Role of radiotherapy in extranodal lymphomas	Teaching Lecture  Strategies to increase safety in radiation oncology: how to make accidents less likely to occur	Teaching Lecture  Automated planning, knowledge-based planning and other novel developments in treatment planning - how do they work and perform?	Teaching Lecture  Building of NTCP models that contain non-dosimetric parameters	Teaching Lecture  Particle therapy: how to start up and carry out daily clinical practice	Three-dimensional organoid culture system	Teaching lecture  Commissioning of brachytherapy TPS elements: applicator library, volumetry, dose data and algorithms			CW 2
08:45- 10:00	New developments in Personalised Radiation Oncology (PRO)  E-health and PRO: mobile technology and wearable sensors  Integration and analysis of complex data for PRO  Innovative clinical trial designs for PRO  Decision support systems and shared decision making	Symposium  Safety and clinical and cost effectiveness of multi-modality IGRT and ART  What evidence is needed to assess cost-effectiveness of new technology and how can we get it (easily)?  Tips and tricks for safe and effective routine clinical application  Do we have the (software) tools for safe application?  Development of procedures for safe clinical application of plan-of-the-day adaptive radiotherapy	Symposium  Robust optimisation in protons and photons  What is the actual robustness of the plans we deliver in clinical particle therapy practice, and what measures do we take to obtain it?  Minimax robust optimisation applied to IMPT for oropharyngeal tumours  Clinical implementation of coverage probability planning in cervix cancer	Symposium  Ultra fast online therapy adaptation (replanning, dose accumulation QA)  Automatic image segmentation for on-line adaptive RT  Ultrafast treatment planning and dose reconstruction  Online tumour tracking – technology and quality assurance	Symposium  Particle therapy: how to start up and carry out daily clinical practice  RTTs skills for proton therapy – how and what to include in a learning programme  How to start up a proton therapy department – the point of view of a RTT  Workflow in a proton therapy department – real difference from photon therapy?	Symposium  Combining tumour and normal tissue models  Novel approaches in the study of bladder cancer  Combining tumour and lung tissue radiation	Symposium  Paediatric brachytherapy  The AMORE concept and late effects outcome for paediatric brachytherapy  Brachytherapy for bladder/prostate rhabdomyosarco ma: clinical outcome and functional results  Intraoperative HDR in paediatric brachytherapy		Poster Viewing 5	

10:00- 10:30	Coffee Break											
10:30- 11:30	MTB Lymphoma	Symposium  Clinical impact of waiting times	Proffered Papers	Proffered Papers	Proffered Papers	Proffered Papers	Proffered Papers	Proffered Papers	Poster Viewing 6			
11:40- 12:10	Presidential Symp	oosium										
12:10- 12:30	Jens Overgaard L	egacy Award (20 mi	in)									
12:30- 13:00	Regaud Award Lecture (25 minutes)											
13:00- 14:45	13:30-14:30 GEC- Lunch, Satellite Sy	ESTRO Assembly mposium, Poster Vie	wing									
14:45- 16:00	New paradigm in HNSCC  Modern biomarkers for therapeutic strategy: radiation dose or volume modification  The changing role of the head and neck surgeon in HPV-positive oropharyngeal squamous cell carcinoma, or do we still need surgery?  Radiation deescalation strategies in HPV-positive squamous cell carcinoma	Costs and value of radiotherapy innovations: how to assess Health Technology Assessment: what's in a word? Radiotherapy costs: the good, the bad and the ugly Method of development of ESMO Magnitude of Clinical Benefit applicable for radiotherapy	Debate  This house believes that proton guided photons will be superior to photon guided protons	Proffered papers	Focus on ART: the clinical difficulties  Multi-parametric functional PET/MR imaging for RT individualisation  Metabolic and functional MRI for glioblastoma dose-painting trial  RAIDER study on plan of the day and dose- escalation for bladder cancer	Symposium	Registration and fusion techniques Rigid registration techniques for different imaging modalities  Deformable registration for dose summation Imaging and fusion techniques for focal brachytherapy		Poster Viewing 7			
16:00- 16:30	Coffee Break											
16:30- 17:30	Proffered Papers	Symposium  Global Task	Proffered Papers	Proffered Papers	Proffered Papers	Proffered Papers	Proffered Papers	Proffered Papers	Poster Viewing 8			

		Force on Radiotherapy for Cancer Control					
17:40- 17:50	Academic Award Lec Jack Fowler Univer		Award:				
17:50- 18:10	Company Award Lec ESTRO-Varian Awa ESTRO-Accuray Av	ctures rd:					

# **MONDAY, 8 MAY 2017**

	CLINICAL MEETING	CLINICAL MEETING	INTERDISCIPLI NARY MEETING	TARGET MEETING	BIENNIAL PHYSICS MEETING	BIENNIAL PHYSICS MEETING	RTT MEETING	YOUNG TRACK		
08:00- 08:40	Teaching Lecture  State of the art multimodality treatment of rectal cancer	Teaching Lecture  SBRT for vertebral metastases: experimental or routine practice?	Teaching Lecture  Challenges in proton radiotherapy  How to reduce range uncertainties  Adaptation to anatomical changes: needs and pitfalls	Teaching Lecture  HDAC inhibitors and chromatin	Teaching Lecture  State of the art and future improvements in in-room cone beam CT image quality	Teaching Lecture  Radiomics for physicists – understanding feature extraction, quality, selection, prediction modelling, statistics, performance validation and possible applications of radiomics in clinical routine	Teaching lecture  Focus on lung cancer: what a radiotherapy department should offer their patients	Teaching Lecture  'Show me the money': Tips and tricks on how to write successful grant proposals		CW 3
08:45- 10:00	Symposium  Rectal cancer – prediction and individualisation  Sequence of radiotherapy, chemotherapy, and surgery: current concepts and trials  Organ preservation by optimised chemoradiothera py: ready for prime time?  Imaging and molecular profiles to predict response to chemoradiothera py: where do we stand?	Symposium  Radiotherapy of brain tumours  Radiotherapy for low grade glioma in adults: risk group stratification and clinical evidence  Radiotherapy for anaplastic grade III glioma in adults: what is the role of combined chemotherapy?  'Paediatric' brain tumours in adults	Symposium  MR guided radiotherapy: the new standard of care in 10 years time  Clinical opportunities with MR guided external beam radiotherapy  MR guided brachytherapy - successes and potential future developments  Challenges associated with MR guided radiotherapy  Can we perform RCTs evaluating MR guided	Symposium  Novel approaches in head and neck tumour control  State of the art in head and neck tumour radiobiology  Novel developments in the radiobiology of HPV-positive head and neck tumours	Symposium  Experimental therapies  Grid therapy  Strategies for radiosensitisation with gold nanoparticles  Potentials of Cerenkov imaging in radiotherapy	Symposium  Adaptive radiotherapy (both anatomical and 'functional' changes)  Image registration and dose accumulation  Adaptive strategies to account for anatomical changes  Adaptive strategies to account for functional changes	Symposium  Focus on lung cancer: what a radiotherapy department should offer their patients  Optimal delineation  ART in lung cancer: when and for whom?  Improvements in physics, DIBH in lung	Career Symposium  Education and research grants  ERC grants - how to succeed  ESTRO educational grants and mobility grants	Poster Viewing 9	

			radiotherapy?							
10:00- 10:30	Coffee Break									
10:30- 11:30	Proffered Papers	MTB Brain metastases	Symposium  Radiomics and imaging databases for precision radiation oncology	Novel approaches in prostate tumour control  State of the art in prostate tumour radiobiology  Novel developments in molecular targeting of prostate cancer	Proffered Papers	Proffered Papers	Proffered Papers	Keynote Lecture	Poster Viewing 10	
11:40- 11:50	Donal Hollywood	Award								
11:50- 12:30	Highest Scoring A	bstracts								
12:30- 13:00	Breur Award Lect	ure								
13:00- 14:45	Lunch, Satellite Syr	mposium, Poster View	wing							
14:45- 16:15	Symposium	Symposium	Symposium	Symposium	Debate	Proffered papers	Symposium	Scientific symposium	Poster Viewing	
	Non-rectal GI tumours: key open questions to be answered from (and for) the radiation oncologist!  Radio(chemo)the rapy in oesophageal cancer: can we do better?  Does radiotherapy still have a role in the management of pancreatic cancer?  Standard treatment in anal cancer: where do	Locally advanced breast cancer  Personalised local and locoregional radiotherapy in breast cancer  Where should we place radiotherapy in high risk cases: before or after surgery?  Radiotherapy after complete response after neoadjuvant CHT. Is it needed?	From big data to better radiotherapy	Novel approaches in lung tumour control  State of the art in lung cancer radiobiology  Secretome as novel target for lung cancer			Focus on prostate cancer: what is the best radiotherapy we need to treat our patients with  What are the best ingredients to deliver the optimal radiotherapy for prostate cancer?  Spacer / hypofractionation  Using an MR Linac for prostate cancer patients	Young ESTRO meets ESTRO School  Introduction and presentation of FALCON (Fellowship in Anatomic delineation and CONtouring) online contouring system as a tool for e-learning  Lung cancer  Cervical cancer  Rectal cancer		

	we stand and									$\overline{}$
	where should we									
	go?									
16:15-	Coffee Break									
16:45										
16:45-	Proffered Papers	Proffered Papers	Symposium	Symposium	Proffered Papers	Proffered Papers	Proffered Papers	16:45-17:00	Poster Viewing	
17:45	·	· ·	7 '	1 .	·	· ·	·		12	
			Patient	Novel				Info from		
			Reported	approaches in				yESTRO		
			Outcomes	colorectal				Activities and		
			(PROs) in	tumour control				short report from		
			radiotherapy	tumour control				Agora		
			radiotilerapy	State of the art in				Agura		
			D:#*	State of the art in				47.00 47.45		
			Differences	colorectal cancer				17:00-17:15		
			between PRO					Interactive quiz		
			and clinician	Immunobiology of						
			reported	gastro-intestinal				17:15-18:00		
			morbidity and	tumours				Young reception		
			associations to							
			clinical outcome							
			Collecting PROs							
			in routine clinical							
			practice to							
			assess							
			radiotherapy							
			toxicity and							
			develop normal							
			tissue							
			complication							
			probability							
			models							
			PROs							
			instruments used							
			in clinical trials							
17:50	ESTRO General									
	Assembly									
22:00	Social Event									
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# **TUESDAY, 9 MAY 2017**

	CLINICAL MEETING	INTERDISCIPLINARY MEETING	TARGET MEETING	BIENNIAL PHYSICS MEETING	BIENNIAL PHYSICS MEETING	RTT MEETING	
08:30- 09:10	Teaching Lecture  New radiotherapeutic horizons in soft tissue sarcoma treatment	Teaching Lecture  Clinical evidence for hypofractionation in prostate cancer: what is the optimum?	Teaching Lecture  Microvesicles and circulating tumour/DNA in radiation oncology	Teaching Lecture  Update in nuclear medicine for radiation oncology	Teaching Lecture  Basics, implementations, limitations, of Monte Carlo dose calculation algorithms	Teaching Lecture  New roles in advanced practice for RTTs	CW 4
09:15- 10:30	Radiotherapy in the elderly Radiotherapy in elderly rectal cancer patients Breast cancer Glioblastoma Lung	Symposium  Selection of patients and radiotherapy technique for APBI in the light of new phase III trial data  Target coverage and dose to organs at risk using different techniques of APBI (EBI, IORT, BT)  External beam partial breast irradiation: changing patient selection based on current evidence  Partial breast irradiation with brachytherapy: changing patient selection based on current evidence	Symposium  Novel approaches in poor tumour control sites  Use of radiopharmaceuticals in pancreatic cancer  Contribution of microenvironment of malignant gliomas to angiogenesis  mRNA-based vaccines and Lewis lung cancer	Symposium  4D imaging and tracked delivery  MLC tracking: from bench to bedside  Motions models and tracking using MR  Tracking using electromagnetic transponder	Symposium  Modelling and treatment customisation  Developments in head and neck toxicity data, models, and treatment optimisation  New NTCP data in the thoracic region  New NTCP data in the pelvic area	Symposium  RT is technology driven. How to keep the patient involved?	
10:30- 11:00	Coffee Break						
11:00- 12:00	Hypofractionation in prostate cancer  Moderate hypofractionation in prostate cancer: what have we learnt from phase 3 trials  Extreme	Is there any ground for boost brachytherapy in the time of high precision IGRT/IMRT?  The efficacy of IGRT/IMRT simultaneous integrated boost (SIB) in	Novel approaches in tumour control  Molecular mechanisms of radiation-induced in situ tumour vaccination  Novel developments in paediatric cancer	Applications and challenges in dosimetry for MR-linacs  Pre-treatment phantom dosimetry: effects in different phantoms and detectors	Novel approaches for combining imaging and non-imaging data for radiotherapy response predicition  Modelling the relation among volume, vascularisation and radio-sensitivity in	Debate  Lost in technology. more and more technology involved in patient treatment - are we still interacting with patients?	

fut or mi Hy pro of	ture of prostate care repeating past istakes? ypofractionation in rostate cancer: a word caution	gynaecology and breast  Dose gradients: the effect of high doses inside the CTV comparing boost brachytherapy with SIB  Why use invasive techniques for boost if IGRT is more comfortable for the patient?	Reference dosimetry: getting the basics and calibration right  Clinical commissioning of MR guided treatment systems	cervical cancer exploiting Doppler ultrasonography data  Machine learning and bioinformatics approaches to combine MP data for outcome prediction  Tissue classification models based on imaging and non- imaging	
12:00- Clo	losing Debate				
13:00 Co	onclusive Remarks				